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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/790,245

03/02/2004

Wolfgang Held

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EXAMINER

NGUYEN, TU MINH

ART UNIT

PAPER NUMBER

3748

MAIL DATE

DELIVERY MODE

06/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/790,245

Applicant(s)

HELD ET AL.

Examiner

Tu M. Nguyen

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. An Applicant's Request for Continued Examination (RCE) and an Applicant's Amendment filed on May 29, 2007 have been entered. Claims 1, 3, and 5-7 have been amended. Overall, claims 1-7 are pending in this application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (U.S. Patent 5,911,681).**

Re claims 1 and 5, as shown in Figures 1, 2, 6, and 7, Tanaka et al. disclose a vehicle exhaust system and a method of triggering exhaust flaps in said exhaust system, the system comprising:

- triggerable exhaust flaps (40, 10),
- a vacuum storage device (41) operatively connected via a nonreturn valve (6) to an intake system (11) and to an exhaust system (8) via a triggerable solenoid valve (VSV) in parallel therewith, and

- at least one engine characteristics map (Figure 5, 6, or 8) stored in an engine control unit (ECU (100)) for triggering the solenoid valve (VSV) to open and close the exhaust flaps (40) as a function of the at least one stored engine characteristics map which includes the rotational speed, engine load, the engaged gear, and optionally additional control variables so as to selectively increase an engine torque or power (when the engine is started in cold plate (i.e., low engine load and low exhaust or catalyst temperature), the solenoid valve (VSV) is activated to allow the vacuum in the intake system to close flow path B, open path A, and close control valve (10) to prevent exhaust gas recirculation back to the engine in order to minimize an engine torque fluctuation and to prevent engine stalling due to combustion instability (also see lines 43-56 of column 10, lines 12-18 of column 9, and lines 7-32 of column 11)).

Tanaka et al., however, fail to disclose that by minimizing torque fluctuation and by preventing engine stalling, they also optimize at least an engine sound.

It is well known to those with ordinary skill in the art that an engine such as the one in Tanaka et al. would make unpleasant sounds such as “coughing” when the engine begins to stall under a cold start idling condition. By closing the exhaust flaps (40) to open flow path A, close flow path B, and close control valve (10) under the cold start idling condition, they prevent the engine from stalling and thus, improve engine sound. Therefore, such disclosure by Tanaka et al. is notoriously well known in the art so as to be proper for official notice.

Re claims 2, 3, and 6, in the method and system of Tanaka et al., the at least one appropriate engine characteristics map is selected in the control unit from the stored engine characteristics maps depending on a preselectable requirement (see line 42 of column 8 to line 25 of column 9).

Re claims 4 and 7, the method and system of Tanaka et al. disclose the invention as cited above, however, fail to disclose that the selected appropriate engine characteristics map is configured to provide switching between operation of the vehicle as a street vehicle and as a racecar.

As depicted in Figure 5, 6, or 8 and indicated on lines 43-56 of column 10, Tanaka et al. open or close the exhaust flaps based on at least an engine load. It is obvious to one with ordinary skill in the art that a vehicle operating under a low engine load condition is being driven at a relatively low speed on a city street; and that a vehicle operating under a high engine load condition is being driven at a relatively high speed on a racing circuit.

Response to Arguments

4. Applicant's arguments with respect to references utilized in the previous Office Action have been considered but are moot in view of the new ground(s) of rejection.

Prior Art

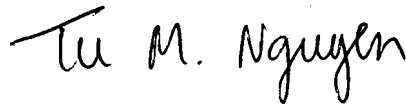
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of two patents: Hashimoto et al. (U.S. Patent 5,010,862) and Wenzlawski et al. (U.S. Patent 5,967,117) further disclose that a stalled engine during an idling mode would make unpleasant sounds and vibration.

Communication

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tu Nguyen whose telephone number is (571) 272-4862.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas E. Denion, can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



TMN

June 7, 2007

Tu M. Nguyen

Primary Examiner

Art Unit 3748